



THE WAY DOWN

How to make the descent easier. Simple things you
can do on your next hike.

A free eBook from Ridgebrace



WHY THE WAY DOWN IS HARDER

Going up makes you breathe hard. Coming down is where your knees do the work. Every step down, your legs have to brake your whole body, often with a pack on.

Your knees do the braking

Lab studies that compared walking downhill with walking on flat ground found clearly higher loads on the knee on the way down. Your thigh muscles, the quads, do most of that braking work.

Kuster et al., 1995 and 1997. Alexander and Schwameder, 2016.

Poles take some of the load

Two lab studies found that hiking poles lowered the load on the knee when walking downhill. Most of it came from the force going into the poles, and from leaning a little more forward.

Schwameder et al., 1999. Bohne and Abendroth-Smith, 2007.

The good news: most of what makes a descent easier is technique, and you can start on your next hike. That's what the next pages are about.

This eBook is general hiking advice, not medical advice. If your knee hurts a lot, is swollen or gives way, see a doctor or a physical therapist before your next hike.

SHORT STEPS, SOFT KNEES



Shorten your stride

Long steps hit harder and make it easier to lose your balance. Take short, controlled steps and keep your feet under your body.



Keep your knees a little bent

Locked knees pass every bump straight through. Soft knees work like shock absorbers and help you react to roots and loose rock.



Don't lean back

Leaning back feels safe, but it puts your weight behind your feet and makes a fall more likely. Stay upright or lean very slightly forward, with your body over your hips and knees.

USE YOUR POLES WELL

Poles are the one thing studies show takes load off your knees on the way down. They only help if you actually lean on them.



Make them a little longer

Lengthen your poles a bit compared to your uphill setting, so you can reach the ground ahead of you without bending over.



Plant them ahead of you

Put the tips down slightly in front of your body before you step. That gives you extra points of contact and something to lean on as you lower yourself.



Wear a sleeve with your poles, not instead of them

A knee sleeve gives a little extra support. Your poles take real load off. Use both.

Poles do cost a bit more energy. One review of the research put it like this: they "decrease lower extremity loading and forces but increase cardiovascular demand." On a long descent, that trade is usually worth it.

Hawke and Jensen, 2020.

PACE AND LINE



Slow down

There's no prize for the fastest descent. A slow, steady pace gives you time to react to loose gravel, wet rock and roots.



Zigzag on steep ground

Where the trail allows it, cross a steep slope in a zigzag instead of going straight down. A shallower line means less stress on your legs and knees.



Look a few steps ahead

Don't stare at your boots. Scan a few yards ahead and pick your line through rocks and roots, so you don't have to make sudden, awkward moves.



Take short breaks

Tired legs are less steady. On a long descent, stop now and then, stretch your calves and quads, and give your knees a minute.



Stay sharp until the car

Many slips happen near the end, when you're tired and the trail looks easy. Keep watching your footing until you're back at the trailhead.

TRAIN FOR THE DESCENT

Your quads control every step down. Stronger legs make long descents a lot less punishing. A few minutes a couple of times a week is a good start.

Step-downs

Stand on a low step. Slowly lower one heel to the floor, then push back up. Go slow on the way down, that's the part that counts.

Lunges

Step forward, lower your back knee toward the floor and push back. Hold a wall or chair for balance if you need it.

Squats

Feet hip-width apart, sit back like there's a chair behind you, then stand up. Only go as low as feels good.

Stairs

Walk up and down a flight of stairs, slow and controlled on the way down. It's the closest thing to a trail you'll find at home.

Build up slowly

Start with shorter hikes and add distance, climbing and descent a little at a time. That gives your muscles and tendons time to get used to it.

Stop an exercise if it hurts, and check with a doctor or physical therapist if you have a knee problem.

Tips on these pages: Great Walks, "How to... hike downhill", 2026. Adventure, "How to avoid knee pain when hiking downhill", 2021.

GETTING THE MOST OUT OF YOUR SLEEVES



The right size

Measure around your thigh about 4 in (10 cm) above the knee. M fits 13.8 to 16.1 in, L fits 16.5 to 18.5 in, XL fits 18.9 to 21.7 in. Between two sizes? Take the bigger one, these run small. A sleeve that's too small can rub, one that's too big can slide.



Put them on before the descent

Pull them on at the trailhead or at the top, before you start going down. Dry skin helps the silicone grip band hold.



Smooth, no folds

Center the sleeve over your knee and smooth out any folds. The band with the silicone dots sits on your skin above the knee.



Care

Hand wash cold with a mild detergent and let them air dry. They contain latex, so skip them if you're allergic to latex.

Questions about your size or your order? Email support@ridgebrace.com and we'll help you out.

Keep this one

BEFORE YOU HEAD DOWN

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| ☐ Poles a little longer than on the way up | ☐ Plant your poles ahead and lean on them |
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| ☐ Sleeves on, smooth, band on dry skin | ☐ Slow, steady pace |
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| ☐ Laces snug so your toes don't slide forward | ☐ Zigzag where it's steep |
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| ☐ Short steps, feet under your body | ☐ Short breaks on long descents |
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|---|---|
| ☐ Knees soft, body upright or slightly forward | ☐ Stay sharp until the trailhead |
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Sources

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Great Walks. How to... hike downhill. greatwalks.com.au, 2026. Russell F. How to avoid knee pain when hiking downhill. advnture.com, 2021.

Questions? Email support@ridgebrace.com. A real person answers. See you on the trail, Enes from Ridgebrace.